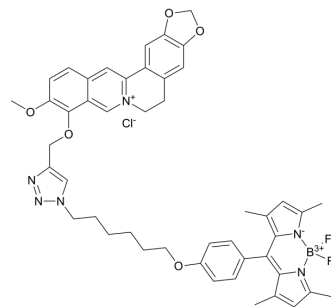


BBR-BODIPY

Cat. No.:	HY-147889
CAS No.:	2456476-47-2
Molecular Formula:	C ₄₇ H ₄₈ BClF ₂ N ₆ O ₅
Molecular Weight:	861.18
Target:	Apoptosis; Caspase; Bcl-2 Family
Pathway:	Apoptosis
Storage:	-20°C, protect from light
	* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 62.5 mg/mL (72.57 mM; ultrasonic and warming and heat to 60°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.1612 mL	5.8060 mL	11.6120 mL
	5 mM	0.2322 mL	1.1612 mL	2.3224 mL
	10 mM	0.1161 mL	0.5806 mL	1.1612 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

BBR-BODIPY is a fluorescent probe that allows screening its interaction with the targeted cells. BBR-BODIPY induces apoptosis and changes the expression of apoptosis-related proteins^[1].

IC₅₀ & Target

Bax Caspase-9

In Vitro

BBR-BODIPY (1-32 μM; 24 hours; MCF7 and MDA-MB-231 cells) has anti-proliferative activity^[1].
 BBR-BODIPY (2-16 μM; 5-60 mins; MCF7 cells) could be quickly taken up into MCF7 cells in 5 mins and the fluorescence intensity exhibits a time-dependent manner^[1].
 BBR-BODIPY (1-32 μM; 24 hours; MCF7 and MDA-MB-231 cells) accumulates in mitochondria and overlaps with Mito tracker red to display yellow fluorescence with a Pearsons co-localization coefficient of 0.72^[1].
 BBR-BODIPY (8 μM, 12 hours) induces apoptosis in MCF7 cells through a mitochondrial pathway^[1].
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.
 Cell Cytotoxicity Assay^[1]

Cell Line: MCF7 and MDA-MB-231 cells

Concentration:	1 , 2 , 4 , 8 , 16 and 32 μ M
Incubation Time:	24 hours
Result:	Inhibited with IC ₅₀ values of 40.81 and 41.46 μ M for MCF7 and MDA-MB-231 cells, respectively.

Western Blot Analysis^[1]

Cell Line:	MCF7 cells
Concentration:	8 μ M
Incubation Time:	12 hours
Result:	The amounts of Bax and Cyto C released from mitochondria and cleaved Caspase 9 were up-regulated in MCF7 cells.

REFERENCES

[1]. Jin M, et al. Synthesis of a novel fluorescent berberine derivative convenient for its subcellular localization study. Bioorg Chem. 2020 Aug;101:104021.

Caution: Product has not been fully validated for medical applications. For research use only.

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